hearing loss in 17 (81%). Seven infants were lost to follow up and the tympanic membranes were not satisfactorily visualised in three cases.

53% of infants came from single parent families and only 9.2% had a working parent, in all cases an unskilled labourer.

73% of mothers were current smokers and smoked on average 17.8 cigarettes per day. Overall 77% of infants were exposed to cigarette smoke. Surprisingly, there were no ex-smokers in the study group.

The mean (±SD) age of infants who attended was 10.67 (2.4) months and there was no difference in the age (p=0.5) or (p=0.12) sex distribution of those who passed or failed the hearing test. The main results are shown in the accompanying table. Infants who were exposed to cigarette smoke were nearly five times more likely to have a hearing deficit and were three times as likely to have visible abnormalities of the tympana. When infants with normal looking tympana who were not exposed to smoke were compared to those who were exposed and had abnormal tympana the prevalence of hearing deficits rose from 6.2% to 64.5% (p=0.0001).

Discussion

This is the first study to report an association between passive exposure to cigarette smoke and hearing loss in infants. Several studies have looked at this association in older children aged between one and 11 years with the majority in the two to seven year age range.[5-7,8,9,10,11,12,13] The three case control studies published report an odds ration of 1.6 - 2.8 of exposure to parental cigarette smoke in children attending hospital with middle ear effusions.[5-7] Six studies of children in the general population have reported on the association between middle ear effusions and exposure to passive cigarette smoke.[8,9,10,11,12,13] Only three of the studies could demonstrate a positive association.[8,10,13]

This study differs from the others in a number of respects. The main end point measured was hearing loss rather than abnormal tympanometric responses. Hearing was assessed blindly without knowledge of exposure status by a single operator thus eliminating inter observer bias. The specificity of diagnosis was high as 81% of diagnoses were confirmed by a medical audiologists. Indeed the specificity may be higher as glue ear tends to resolve spontaneously and this may occurred in some of the cases between testing and referral to the audiologist.[14] The study was confined to a single social class group in a small geographical area which would help to further reduce the possibility of bias.

The prevalence of hearing deficit in the non exposed group was 10% compared to 49% in the exposed group. If the association reported here is causal then 75% of hearing deficits in this cohort could be attributed to exposure to cigarette smoke. The results of this study support the hypothesis that passive exposure to cigarette smoke is a cause of middle ear effusion and hearing loss in children.

References

1. Harlep S, Davies AM. Infant admissions to hospital and maternal smoking. *Lancet* 1974; i: 529-32.
2. Colley JRT, Holland WW, Corkhill RT. Influence of positive smoking and nonsmoker's children. *Lancet* 1974; ii: 1031-4.
3. Commission of the European Communities: health Services Research 1988. In: Early detection of vision, hearing and language disorders in childhood. Vander Lam et al, eds. Commission of the EC, Brussels.
4. Sheridan MD. Simple clinical hearing tests for the very young or mentally retarded. *BMJ* 1958; ii: 999-1004.
5. Kraemer MJ, Richardson MA, Weiss NS et al. Risk factors for persistent middle effusions: Otitis media, catarrh, cigarette smoke exposure and atopy. *JAMA* 1983; 249: 1022-5.
6. Black N. The aetiology of glue ear - a case control study. *Int J Pediatr Otorhinolaryngol* 1985; 9: 121-33.
7. Hinton AE, Buckley G. Parental smoking and middle ear effusions in children. *J Laryngol Otol* 1988; 102: 992-6.
8. Iverson M, Birch L, Lundqvist GR, Elbrond O. Middle ear effusion and the indoor environment. *Arch Environ Health* 1985; 40: 74-9.
9. Vintner B, Elbrond O, Brahe Peterson C. A population study of otitis media in childhood. *Acta Otolaryngol* [Suppl](Stockh) 1979; 360: 121-3.
10. van Cauwenberge PB. Relevant and irrelevant predisposing factors in secretory otitis media. *Acta Otolaryngol* [Suppl] (Stockh) 1984; 414: 147-53.
11. Birch L, Elbrond O. A prospective epidemiological study of otitis media in young children related to the indoor environment. *ORL J Otorhinolaryngol Relat Spec* 1987; 49: 253-8.
12. Zielhus GA, Rach GH, van der Broek P. Predisposing factors for otitis media with effusion in young children. *Adv Otorhinolaryngol* 1988; 40: 65-9.
13. Strachen DP, Jarvis MJ, Feyerabend C. Passive smoking, salivary cotinine concentrations and middle ear effusions in seven year old children. *BMJ* 1989; 298: 1552-6.
14. Lous J, Fiellau-Nikolajsen M. Epidemiology of middle ear effusion and tubal dysfunction. A one year prospective study comprising monthly tympanometry in 387 non selected seven year old children. *Int J Pediatr Otorhinolaryngol* 1981; 3: 303-17.

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Consultation liaison psychiatry within the general hospital: referral pattern and management

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Abstract

The emergence of consultation psychiatry as an important psychiatric subspecialty is in part due to the siting of psychiatric units in general hospitals, the manifest advances in medical technology and the increasing elderly population needing specialist care. This paper describes an evaluation of all referrals to a liaison psychiatry unit in a 550 bed general hospital over a six month period. 205 requests for psychiatric consultation were received, which represented 2% of all admissions. There was considerable variation between departments with regard to the referral rate. Management most often consisted of advice, with over 50% of patients being subsequently referred for ongoing psychiatric care.

Introduction

Consultation liaison (CL) psychiatry has been defined as 'that area of clinical psychiatry which includes all diagnostic, therapeutic, teaching and research activities of psychiatrists in the non-psychiatric parts of the general hospital'.[1] The siting of psychiatric units in general hospitals and in the community (in line with current health policy[2]) and the advances in medical technology which result in new psychosocial and psychiatric problems for patients[3] will increasingly challenge the resources and expertise of the liaison psychiatrist.

Research in this area to date has mainly included the ascertainment of the prevalence of psychiatric 'cases' in samples of general hospital patients, and care provision in terms of cost effectiveness and of medical outcome.[4,5] One

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children in the intravenous cannula group had to terminate their intravenous treatment prematurely because of complications and inability to maintain intravenous access. The silastic long line group had nearly 70% of their duration of treatment carried out at home compared to only 30% in intravenous cannula group (p value 0.014). The device life assessed was statistically highly significant in favour of the silastic long line group ($p<0.0001$). Cost of the device was higher in silastic long line group.

We came across only very few minor complications from silastic long lones. One child complained of pain after three days and the line had to be taken out and reinserted again in a different site. Four patients had leakage at the connector (blue) site which we corrected by simple manipulations. One line ruptured after administration of antibiotics using a large bore needle and a bigger syringe. No incidence of sepsis occurred with silastic long lines in our study.

Intravenous cannula complications are well known. Even though they were not very serious they warranted frequent change in cannulas. Pain, phlebitis, blockage and leakage into the tissues were very common problems. During the duration of treatment in the intravenous cannula group, finding suitable veins for cannulation became more and more difficult.

Discussion

It appears that silastic long lines are still only rarely used for antibiotic administration in cystic fibrosis patients in Ireland, even though their use is well established in many centres in the United Kingdom.[1] Since we have started using these lines in our cystic fibrosis population, the number of hospital admissions has been reduced. Children as well as parents were well disposed to the idea of silastic long line catheterisation because of the trauma these children have gone through due to repeat venepunctures before. The long line also allows greater freedom of mobility to the child. We allow them to take part in active sports, including swimming with the line in situ.

This device has given an opportunity to the cystic fibrosis children to spend their time with their parents at home while being treated actively. Even though the silastic long line group had a significantly higher device cost, reduced number of admissions and visits to the hospital reduce the overall cost of the treatment. It also decreases the workload of medical as well as nursing staff.

The skill and technique required for insertion of silastic long lines can be easily acquired by any house officer with suitable training. We have devised a simple management protocol regarding silatic long line care which is distributed to the parents and nursing staff. From our study we found that the silastic long line (Vigan) is an extremely useful device for intravenous administration in children with cystic fibrosis, which can be managed safely and easily at home.

Reference

1 Williams J, Smith HL, Woods CG, Weller PH. Silastic catheters for antibiotics in cystic fibrosis. *Arch Dis Child* 1988; 63: 658-9.

2 Kietric KA, Lobas JG. Use of a single silastic intravenous catheter for cystic fibrosis pulmonary exacerbations. *Ped iatr Pulmonol.* 1988; 4(3): 181-4.

3 Lombardi Tp, Gunderson B, Zammett LO, Walters JK, Morris BA. Efficacy of 0.9% sodium chloride injection with or without heparin sodium for maintaining patency of intravenous catheters in children. *Clin Pharm* 1988; 7(11): 832-36.

4 Gilbert J, Robinson T, Littlewood JM. Home intravenous antibiotic treatment in cystic fibrosis. *Arch Dis Child* 1988; 63: 512-7.

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Passive smoking and hearing loss in infants

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Abstract

A cohort of infants scheduled to attend the 10 month developmental assessment were studied to determine whether hearing deficits are more common in those exposed to cigarette smoke. Hearing was assessed by the standard distraction test and those with persistent abnormalities were referred to a medical audiologist. Overall 77% of infants were exposed to cigarette smoke and 40% failed the initial hearing tests. Exposure to cigarette smoke was associated with a 4.9 times increase in the prevalence of hearing deficits and 75% of the cases of hearing loss were statistically attributable to exposure to cigarette smoke. The results of this study lend further weight to the hypothesis that exposure to cigarette smoke is a cause of hearing deficits in children.

Introduction

There is considerable evidence that passive exposure to cigarette smoke causes an increased frequency of bronchitis and pneumonia in the first year of life.[1,2] The aim of this study was to determine whether passive exposure to smoke is also associated with hearing deficits in infants, the majority of which are due to obstruction of the eustachian tube with consequent middle ear dysfunction.[3]

Subjects and methods

A cohort of infants due to attend their first scheduled developmental examination in a socially deprived area where chosen as the study group. As part of the examination hearing was assessed by the Stycar distraction test and the tympanic membranes inspected by a single trained operator.[4] The tympanic membranes were judged to be abnormal if there was scarring, retraction or visible inflammation. Subsequently a social occupational and smoking history was taken from the accompanying parent. Those who failed the initial hearing test were retested on two subsequent occasions three weeks apart and if the hearing was still abnormal were referred to a medical audiologist.

Categorical variables were analysed using the Mantel-Haenszal Chi Square test and continuous variable with the t-test.

Results

87 (83.6%) of 104 infants attended the scheduled examination. Thirty five infants (40.2%) failed the initial hearing test and 34 infants had visible abnormalities of the tympanic membranes. On repeat testing 21 infants persistently failed the hearing test and were referred to a medical audiologist who confirmed

Table - Results

	Exposure to smoke		Relative risk	P value
	Yes	No		
Normal hearing	34	18		
Abnormal hearing	33	2	4.9	0.001
Normal tympana	34	16		
Abnormal tympana	31	3	3.0	0.01

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